

SwithS(Study with Skku): Study integration platform for SKKU Students

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Abstract. Our school, Sungkyunkwan University provides a variety of study and mentoring(tutoring) programs to support our academic and personal growth. Also, students actively engage in these offerings. However, despite the breadth of these programs, the school lacks a unified platform for study program management. The most frequently used platform has been Naver Cafe, but it primarily serves as a tool for monitoring program outcomes and does not provide essential features during learning process. Additionally, when students are unable to participate in school-run programs, there is currently no convenient study platform available for individual use during the study group recruitment process. Therefore, this paper proposes a learning platform exclusively for students at Sungkyunkwan University, called SwithS(Study with SKKU). This platform enables students to either recruit or join study groups while also providing essential features such as schedule management and resource sharing to support effective learning. We believe that this platform will not only enhance the academic capabilities of our students but also improve overall efficiency within the school-run programs.

1 Introduction

“SwithS” is a web-based study platform for students at Sungkyunkwan University. According to our survey, about 73% of 82 respondents, or 60 people, said they had participated in the school’s study/mentoring/teaching program. In addition, 49 people answered “Yes” to the question, “If you have a new platform to manage study/mentoring, do you think you can use it more conveniently than the existing methods (Naver Cafe, documentation and submission)?”. 38 people said they had difficulty recruiting and applying, with 38 responding that they had sought a study at Everytime. In addition, 66 people expressed their intention to use a study platform dedicated to students at Sungkyunkwan University. In this respect, the main functions of the platform will be of sufficient help to students. Details of the platform include:

1. Register, Login
Use skku email authentication.
2. Profile settings

3. Register for a study
4. Search
Search by search word, category.
5. My study room
Provide announcements, bulletin boards, and study materials functions for each study.

We will provide more detailed explanations of these functions in the following sections.

2 Motivation and Objective

2.1 Motivation

There are many types of studies at Sungkyunkwan University. Many Students can also use the school community Everytime application to find a study. However, there are various posts in Everytime, and even if a study recruitment post is posted, it is not easy to find a study member because of other posts.

In addition, there is a problem that studies such as "shoulder companion" recruited by schools cannot participate when the recruitment deadline is over. The biggest problem is that no specific study platform exists. Even if the study was created luckily, the study will be conducted using Kakao Talk and Naver Cafe, and all activities such as attendance check and uploading study resources will be conducted here. Since Naver Cafe and Kakao Talk it is not a study platform, there are many inconveniences for users to use.

While there are various study platforms, but there is a problem that it is available to everyone, not just Sungkyunkwan University students. In addition, most websites only recruit studies, and there is no function to manage them. According to the survey results, most people agree on the need for a study platform. We would like to create a study flak form for Sungkyunkwan University to solve these problems.

Our study platform will help Sungkyunkwan University students organize their studies and proceed with their studies, which will greatly help students in their learning activities.

Category	Positive Responses
Participation in school's study/mentoring/teaching program	60/82
Interested in using a new study/mentoring platform for convenience	49/60
Experienced difficulty in recruiting and applying	38/82
Sought study opportunities on Everytime	38/82
Intent to use a study platform for Sungkyunkwan University students	66/82
Total Respondents	82

Table 1: Survey Summary

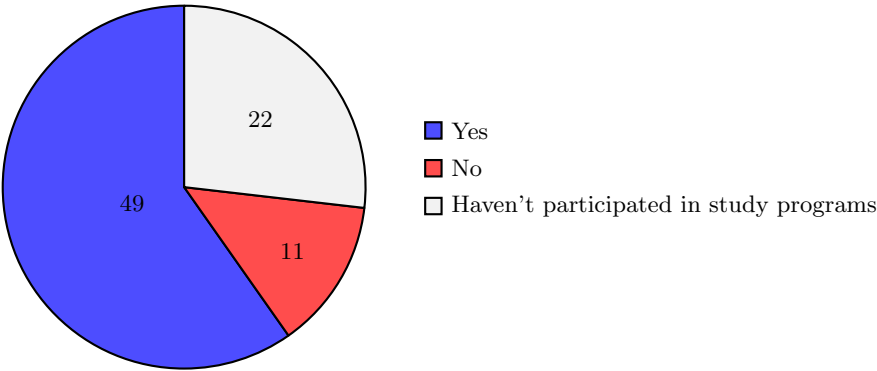


Fig. 1: Interested in using a new study/mentoring platform for convenience (Pie Chart)

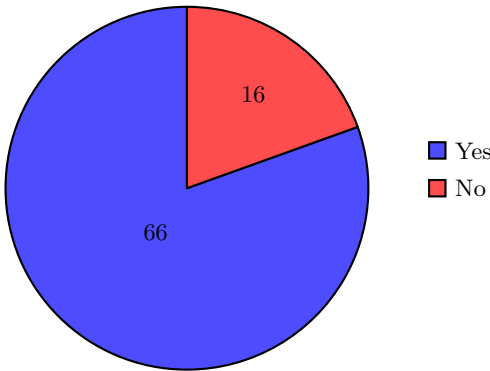


Fig. 2: Intent to use a study platform for Sungkyunkwan University students (Pie Chart)

2.2 Objective

Our goal is for our platform to become the official study platform of Sungkyunkwan University. We hope to be able to conduct all studies hosted by schools or conducted by departments within our platform. We would like to organize only Sungkyunkwan University students so that studies can be actively conducted by major and subject. We hope that students who have difficulty studying their majors will use our service to get a lot of help. It will not only end with recruiting studies, but also provide services to students to complete their studies through functions such as study schedule management, announcements, and study archives.

In addition, our platform will support students' personal growth and community formation as well as achieving academic goals. Users will be able to find opportunities to share different interests and capabilities and grow together. Our study platform hopes to enrich students' academic life, create an environment where they can share knowledge and grow, and become a member of Sungkyunkwan University community. Through this, we will constantly strive to build the knowledge and connections students need to prepare for the future.

3 Background and Related Work

3.1 Background

Currently, our school is running various studying and mentoring programs to support our students' academic and personal growth. These programs have become incredibly popular among our students. For example, in the case of Sungkyun Tutoring, over 1,000 students actively sign up to participate each semester. However, these programs operate independently and use different platforms, such as School website (announcement boards), Everytime(Online school community platform), Naver Cafe, PDF submissions (via email), and etc, for promoting programs and managing status.

Furthermore, when students are unable to participate in school-run programs, they usually rely on online communities such as Everytime to find study partners. However, this approach typically involves simple post-based communication, which can be very inconvenient when recruiting or joining study groups. This can lead to a lack of learning and networking opportunities.

3.2 Related Works

Recruiting Platforms(using in SKKU) To participate in learning or tutoring sessions, students typically use two main methods: School-Run Programs and Personal Recruiting.

School-Run Programs Students have the option to engage in programs organized by schools or student associations. These programs are typically promoted through the school's official website(usually use announcement boards). Programs coordinated by student associations are often advertised on Social Network Services such as Everytime or Instagram. Recruitment drives for these programs usually occur at the beginning or end of semesters, with the program running for one semester or a specific period. However, one drawback is that students who miss the application period cannot participate.

Personal Recruiting In cases where students wish to form their own study groups, they often use platforms like Everytime. Here, individuals seek study partners by either posting or responding to existing recruiting posts. However, the anonymity prevalent on Everytime can raise safety concerns. Additionally, due to the nature of the platform, posts can easily faded into oblivion, making it challenging to find suitable study partners.

Managing Platforms(using in SKKU) In many cases, studying or tutoring programs hosted by the school(or student associations) is managed through Naver Cafe. Participants in these programs are required to join the cafe to engage in activities. Typically, each study group is allocated one bulletin board within the cafe, primarily utilized for submitting weekly or monthly progress reports and for monitoring purposes. Consequently, services necessary for conducting studying(or tutoring), such as schedule management, sharing learning materials, and announcing, are not provided. Therefore, participants should use other platforms such as messenger, cloud drives, or Notion. In some cases, the platform operated by the organization hosting the study does not exist. In this case, the weekly(or monthly) report is managed by the participant filling it out and sending it to the manager by email. As in the previous case, scheduling, sharing resources, and announcing must be performed through alternative platforms.

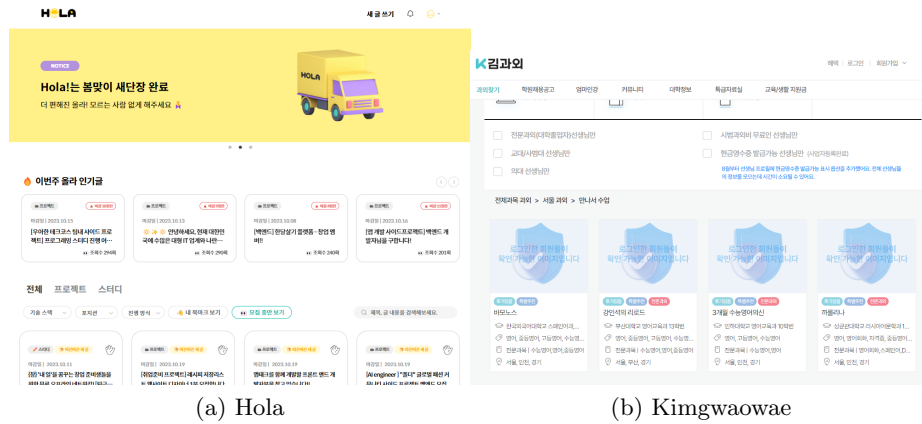


Fig. 3: Images of Naver Cafe

Other online platforms

HOLA HOLA is a online platform primarily designed for developers, used for finding side-projects or study groups. After users create their accounts, they can either create their projects or join projects/study groups recruited by others. However, HOLA primarily focuses on recruitment and does not provide specific features for managing the study process. Since this service is specialized for developers, it is difficult to use for general college students.

Kimgwaowae(김과외) Kimgwaowae is a well-known private tutoring platform that matches tutors with students. Similar to HOLA, it focuses on matching students and tutors based on criteria but does not offer additional support during the tutoring process. The platform provides free consultation between students and tutors, but operates by charging a portion of the tutoring fee as a brokerage fee when a student and tutor are matched.



(a) HOLA

(b) Kimgwaowae

Fig. 4: Images of Websites

4 Problems and Solutions

4.1 Problem statement

It's challenging to create study groups unless you join academic clubs. This makes it difficult to initiate study sessions individually or form groups that align with one's specific interests. Additionally, with the decline of many academic clubs due to the impact of COVID-19, finding study groups that match one's preferences has become even more challenging.

In addition, there is a scarcity of study groups dedicated to academic majors. Given the prevailing situation, where study groups predominantly revolve around

long-term learning objectives or short-term goals like TOEIC, GSAT, or coding tests, there's a noticeable shortage of study groups focused on academic majors. This scarcity has been exacerbated by the decrease in academic clubs, making it challenging for students to find study groups that cater to their specific academic interests within the school community.

Finally as mentioned earlier, the ongoing tutoring program is not efficient, lacking a structured format and solely operating within cafes, leading to inadequate accessibility for students. The current system's inefficiency highlights the need for an effective platform that would optimize the process of obtaining educational assistance, addressing the inefficiencies present in the current tutoring setup.

4.2 Proposed solutions

1. A platform for students at Sungkyunkwan University
SwithS is a specialized web platform exclusively designed for Sungkyunkwan University students. Leveraging SKKU students' g.skku.edu email addresses for verification, this platform aims to create study groups accessible solely to students, promoting efficient collaboration and study initiatives within the SKKU community. Using the email verification through SwithS, we ensure that access is restricted to SKKU students, enhancing security and fostering trust within the student community. Students can utilize this platform to form study groups, share their learning objectives, and grow together with their peers. SwithS prioritizes a seamless user experience, boasting an intuitive UI/UX design. One of its key features allows students to create and join study groups based on their majors, interests, or projects, facilitating collaboration and promoting enhanced learning.
2. Multipurpose learning objectives
SwithS is a versatile platform designed to cater to both short-term and long-term study goals. When initiating a study recruitment on our platform, users can specify the duration, target number of participants, and provide a concise description of the study group. Whether it's a study group aimed at achieving short-term objectives like TOEIC, GSAT, or coding tests, or a study group focused on long-term academic goals, our platform offers the flexibility to effectively recruit members and articulate the study's objectives. Through this approach, "InStudy" serves as a conducive space for individuals to find or create study groups tailored to their learning aspirations, fostering a collaborative and conducive environment for growth and achievement.
3. Major learning objective
"SkillHub" is a platform designed to efficiently utilize the unique educational environment of Sungkyunkwan University for organizing and operating study groups. Our university boasts exceptional faculties and educational programs tailored to various majors. Leveraging these strengths, organizing study groups focused on course content proves highly effective. Each major at SKKU offers courses with significant academic depth and breadth. Conducting study groups specific to these courses allows for a

deeper understanding of the material and facilitates collaborative learning. Moreover, forming study groups to prepare for special assignments, projects, or exams enhances preparation and performance.

Within “SkillHub,” we provide features to organize and recruit study groups for specific courses efficiently. This enables students to complement each other’s knowledge, ultimately elevating their academic performance and enriching the learning experience.

4. Community In SwithS, we optimize study group efficiency by creating dedicated communities for each group. These communities act as virtual hubs, facilitating seamless communication and resource sharing. Members can easily share updates, insights, and study materials, enhancing collaboration within the group.
 - Centralized Communication: Each study group has its own community, serving as a central platform for communication. Members can effortlessly share thoughts and resources, promoting a cohesive learning environment.
 - Discussion Forums: Dedicated forums enable focused discussions on specific topics, allowing Q/A sessions and knowledge exchange. This organized approach ensures important discussions are accessible to all members.
 - Announcement Boards: Study organizers can post updates and deadlines on announcement boards, ensuring everyone is well-informed.
 - Resource Sharing: Members actively share study materials and useful resources related to the study topic, enriching the learning experience.

5 Planning in Detail

5.1 Role

IlGeon Kim will be the team leader and will be in charge of project management. YiJi Kim will be dedicated to ui/ux, and will do page implementation. RoWon Chung will do deployment and api development. KyungJune Shin will do db design and api development.

5.2 Brief Schedule

We will do the individual study and project setting in the last week of September and the first week of October. Also, in the first week of October, frontend will start figma design, backend will do db design and backup creation, and will proceed until the second week. Starting in the third week of October, frontend conducts web page development and backend conducts api development. And in the last week of November and the first week of December, all members will conduct testing and optimization, and deployment will take place finally.

Fig. 5: Brief schedule

Task	Assignee	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15
Individual study and project setting	Every Members											
Figma design	Frontend											
DB design & back API creation	Backend											
Web Page Development	Frontend											
API Development	Backend											
Testing and optimization	Every Members											
Deployment	Infra											

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